

Dear Dr. Redwan:

Since I will not be able to attend the meeting due to being committed to another, I thought to put my comments in writing so you may wish to print and discuss in the meeting.

First of all I am puzzled with this program structure that you sent to us, which is new to me for two reasons:

1. I am a member of the sub-committee on this issue, and we never had a meeting since our last, in which we discussed and agreed on the general structure (please see complete table in the last page)
2. I wonder who made such changes, and why should we run in circles and redo what we already have spent time doing and discussing in our last meeting?

Please see some unexplainable changes in your latest version in the following pages.

Please note that a curriculum is not something that one may venture into without a complete plan for the entire curriculum with clear objectives and adopting certain standards. How could one put a structure for only two years, and claim to observe the integrity of the whole program?

All that we need is to keep common courses as same as possible for all engineering, while making minimum adjustments to fit special needs of some engineering departments.

Please note that the proposed curriculum (last table), which we have discussed last meeting was structured based on ABET standards, wherein integrity of various curricular components were adhered to.

Thank you
Yehia Khulief

Proposed Program Structure for Thuraya College 1 & 2 years

Year 1, Semester 1

Course Title	Credit Points
Math 1	4
English Reading/Comprehension 1	3
Physics 1	4
Physical Education 1	1
Humanities & Social Studies 1	2
Applied Chemistry	4
TOTAL	18

CHEM	1xx	Chemistry	3	3	4
ENGL	1xx	English Composition I	3	0	3
MATH	1xx	Calculus I	4	0	4
PHYS	1xx	Physics I	3	3	4
IAS	1xx	Objective Writing Terminology	2	0	2
PE	1xx	Psychical Education I	1	0	1
			16	6	18

This semester is OK

Year 1, Semester 2

Course Title	Credit Points
Math 2	4
English Reading/Comprehension 2	3
Introduction to Programming	4
Physics 2	4
Physical Education 2	1
TOTAL	16

ENGL	1xx	English Composition II	3	0	3
MATH	102	Calculus II	4	0	4
PHYS	1xx	Physics II	3	3	4
ICS	1xx	Computer Programming	2	3	3
ENG	1xx	Introduction to Engineering	2	0	2
PE	1xx	Psychical Education II	1	0	1
			15	6	17

Here; the following g changes were made

- **Introduction to programming is 4-hours instead of 3**
- **Introduction to Engineering was removed**

Year 2, Semester 1

Course Title	Credit Points
Math 3	4
Computer Applications in Engineering	3
Technical English	3
Social & Cultural Studies	2
Specialty Course 1	4
Specialty Course 2	3
TOTAL	19

ENGL	2xx	Technical Report Writing	3	0	3
AME	2xx	Thermodynamics I	3	0	3
MATH	2xx	Calculus III	3	0	3
CE	2xx	Vector mechanics: Statics	3	0	3
AME	2xx	ME Drawing & Graphics	2	3	3
CE	2xx	Eng Mechanics of Materials	3	0	3
			17	6	18

Here; the following g changes were made

- **Math-3 is 4-hours instead of 3**
- **A second course in programming is added**
- **A social studies course is also added here**

Year 2, Semester 2

Course Title	Credit Points
Specialty Course 3	4
Specialty Course 4	3
Specialty Course 5	3
Math 4	4
Economic Analysis of Projects	3
TOTAL	17

AME	2xx	Vector Mechanics: Dynamics	3	0	3
AME	2xx	Thermodynamics II	3	0	3
MATH	2xx	Elem. Diff. Equations	3	0	3
AME	2xx	Materials Science for ME	3	3	4
EE	2xx	Electric Circuits	2	3	3
IAS	2xx	Technical Arabic Writing	2	0	2
			16	6	18

Here; the following g changes were made

- **Math-4 is 4-hours instead of 3**
- **The economics course was also moved to this semester (please see complete Table below.**
- **A social studies course is also added here**
- **The Engineering interdisciplinary course was removed**

This is the structure which we have discussed both in the sub-committee and in the mother committee

PROPOSED APPLIED MECHANICAL ENGINEERING CURRICULUM														
Course	Title			LT	LB	CR	Course	Title			LT	LB	CR	
FIRST YEAR (Freshman)														
CHEM 1xx	Chemistry			3	3	4	ENGL 1xx	English Composition II			3	0	3	
ENGL 1xx	English Composition I			3	0	3	MATH 102	Calculus II			4	0	4	
MATH 1xx	Calculus I			4	0	4	PHYS 1xx	Physics II			3	3	4	
PHYS 1xx	Physics I			3	3	4	ICS 1xx	Computer Programming			2	3	3	
IAS 1xx	Objective Writing			2	0	2	ENG 1xx	Introduction to Engineering			2	0	2	
PE 1xx	Psychical Education I			1	0	1	PE 1xx	Psychical Education II			1	0	1	
				16	6	18					15	6	17	
SECOND YEAR (Sophomore)														
ENGL 2xx	Technical Report Writing			3	0	3	AME 2xx	Vector Mechanics: Dynamics			3	0	3	
AME 2xx	Thermodynamics I			3	0	3	AME 2xx	Thermodynamics II			3	0	3	
MATH 2xx	Calculus III			3	0	3	MATH 2xx	Elem. Diff. Equations			3	0	3	
CE 2xx	Vector mechanics: Statics			3	0	3	AME 2xx	Materials Science for ME			3	3	4	
AME 2xx	ME Drawing & Graphics			2	3	3	EE 2xx	Electric Circuits			2	3	3	
CE 2xx	Eng Mechanics of Materials			3	0	3	IAS 2xx	Technical Arabic Writing			2	0	2	
				17	6	18					16	6	18	
THIRD YEAR (Junior)														
EE 306	Electromechanical Machines			2	3	3	STAT 3xx	Prob. & Stat. for Engineers			2	3	3	
AME 3xx	Manufacturing Processes			3	3	4	AME 3xx	Mechanics of Machines			3	0	3	
MATH 3xx	Methods of Applied Math.			3	0	3	AME 3xx	Automotive Component Design			3	0	3	
AME 3xx	Design of Machine elements			3	0	3	ECON 3xx	Engineering Economics			3	0	3	
AME 3xx	Fluid Mechanics			3	3	4	AME 3xx	Heat Transfer			3	3	4	
IAS 3xx	Human Rights in Islam						IAS 3xx	Ethics in Islam			2	0	2	
				14	9	17					16	6	18	
Summer Session				AME 4xx	Coop Training-I						0	0	0	
FOURTH YEAR (Senior)														
AME 4xx	Coop Training-II			0	0	6	AME 4xx	Senior Design Project			3	0	3	
								AME 4xx	Internal Combustion Engines			2	3	3
								AME 4xx	Vehicle Dynamics & Control			2	3	3
								AME 4xx	Automotive Noise & Vib.			2	3	3
								AME 4xx	AME Elective			3	0	3
								XE 4xx	Technical Elective			3	0	3
				0	0	6					17	9	18	
Total Credits Required: 132														

Color Key: ■ Common Courses throughout all engineering disciplines
 ■ Interdisciplinary engineering courses
 ■ ME Courses

Basic science & Math=32Hrs,

Humanities & Social=17Hrs